The solution for high-performance rubber compounds

> Unilene[®], Braskem's hydrocarbon resin, offers technical and economic advantages in the processing of rubber formulations and in the performance of finished goods. Its main characteristics include compatibility with a wide range of polymeric materials and applications in rubber compounds in general, such as tires, retreads, injected and extruded parts.



Processing benefits

- Reduces compond viscosity
- Enables higher filler amounts
- Reduces degradation of elastomers
- Reduces energy consumption and equipment wear
- Tackifying agent
- Plasticizer
- Avoids formation of lumps

Flow agent



MOLD FILLING

Improved mold filling with lower pressure on equipment.

Benefits for finished goods

- Superior mechanical properties
- Better surface finish and gloss
- Lower failure rate caused by weak points
- Lower abrasion wear

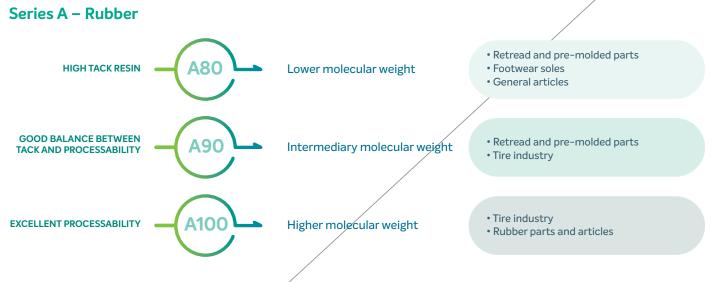


Better balance between grip and friction

values obtained in laboratory

TIRE PERFORMANCE

The use of Unilene[®] in rubber formulations increases tan delta at 0 °C, which means better tire adherence to wet surfaces. Its use also presents a slight reduction in tan delta at 60 °C, which is associated with lower rolling resistance, resulting in fuel savings, lower noise and reduced tire wear.



Technical properties

Unilene® Hydrocarbon Resins – C9		Tg, °C (DSC)	Softening Point RB (°C) (ASTM E-28)	Gardner Color (ASTM D-1544)	Acid Number (ASTM D-974)
Series A (high styrene content)	A-80	38	75 - 86	7 max	< 0.10
	A-90	42	87 - 95	7 max	< 0.10
	A-100	54	96 - 105	6 max	< 0.10